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**Descriptions of North American MOTHS.**

BY AUGUSTUS R. GROTE.

**Mamestra lubens**, n. sp.

♂ ♀.—This species resembles in appearance the European *M. brassicæ* and should replace that species in the "List." It is equal sized but more variegated in color and more lilac tinged and wants the terminal claw to the fore tibiæ which distinguishes the European species, for specimens of which latter I am indebted to the courtesy of George Norman, Esq. Blackish with a faint lilac hue. Eyes hairy; abdomen strongly crested on the middle segments. Transverse lines black, indistinctly geminate, lunulate or waved. Claviform rather wide and obtuse, black margined. Orbicular full, subquadrate with pale or whitish filling, continuously black ringed. Median shade perpendicular, dentate. Reniform large, discolorous, filled in with white, with a yellowish stain and with a darker center, upright, not kidney-shaped, rounded superiorly, straight at base. Subterminal space paler and lilac-tinted, becoming yellow-brown before and along the whitish subterminal line which is continuous and shows the median dentations distinctly. Terminal black cuneiform marks evident. Secondaries wholly brownish fuscous with pale fringes and vague terminal line. Beneath paler with common vague transverse line and discal marks most distinct on hind wings. Expanse 45 mm.

Hab. Canada, Eastern and Middle States.

**Heliothis cupes**, n. sp.

♂.—Fore tibiæ with a longer inner and shorter outer terminal claw; all the tibiæ spinose. Forewings yellowish gray with all the veins finely marked by paler scales. Markings distinct. Basal half line geminate, pale centered, the inner blackish line most distinct. T. a. line geminate, the blackish component lines equally marked, slightly arcuate and uneven. Ordinary spots with darker centers and narrow black annuli pale margined within. Orbicular very near the t. a. line, rounded, well sized. Reniform with a pale central indistinct curved streak. T. a. line a little indented opposite the cell, the pale center more evident than the component lines, running inwardly below the reniform and narrowing the median space inferiorly. Median shade visible below the reniform, approximate to the t. p. line but divergent to the internal margin. The pale subterminal line is preceded by black cuneiform marks most distinct medially. Terminal line black, distinct, preceded by a pale line, broken by

the veins. Fringes indistinctly interlined at base and interrupted by paler at the extremities of the veins. Hind wings pale at base, with the veins soiled with fuscous and with broad blackish borders narrowing inferiorly and centrally interrupted with pale, as is usual in the genus. Beneath very pale yellow gray, with distinct black discal marks and an outer curved transverse line, discontinued inferiorly, on both wings. Expanse 30 mm.

Hab. Texas (Belfrage, No. 95).

Appears to belong to the group with *peltigera*, *dipsacea*, etc.; the fore wings widen more outwardly and the markings are very distinct.

**Cleophana occata**, n. sp.

♀.—The eyes are naked. The frontal vestiture converges from the sides but conceals no clypeal protuberance. Tibiæ unarmed but the fore tibiæ have a blunt and short claw on the inside and a very short process outwardly. Collar pointed medially. Abdomen untufted. Collar above black, below gray-brown, tipped with pale gray-brown. Thorax pale gray-brown. Anterior wings gray-brown. Basal half-line indicated. Median lines obsoletely geminate, very approximate below the median vein. Median shade black, very diffuse, almost entirely filling the median space below the vein and bringing into relief the small concolorous claviform. Ordinary spots concolorous, small, subequal. Subterminal line consisting of whitish streaklets and points preceded by black longitudinal linear marks of unequal length and distinctness. Subterminal space shaded with whitish gray especially below vein. Fringes checkered black and brown. Hind wings whitish at base with soiled veins and rather broad, shaded and even blackish hind borders. Abdomen pale. Beneath with a common line broken into dots on the secondaries which are whitish, irrorate on costal region and have diffuse blackish borders. Head black with a pale interantennal line and pale oral squamæ and palpi. Expanse 27 mm.

Hab. Texas (Belfrage, No. 96, May 13th).

**Orthosia disticha**, Grote.

♂.—Eyes naked, with lashes; tibiæ unarmed. Thorax and abdomen untufted, the latter conical. Fore wings of a peculiar stone gray, sparsely intermixed with black scales, paler to the prominent brown median shade, more brownish beyond this. Basal half line faintly marked, angulate. T. a. line geminate, outwardly oblique to submedian fold below which it forms an inward angulation on vein 1. Orbicular obsolete. Median shade distinct, brown, outwardly oblique to median vein where it approximates to the reniform and forms a slight rounded outward angulation thence still outwardly oblique to internal margin. Reniform yellowish, somewhat medially constricted, distinctly outlined, with an inferior blackish stain. T. p. line geminate, sinuate, well removed outwardly, the component lines equally distinct. Subterminal line palé, subobsolete, indicated at costa by two distinct deep black triangulate marks, the lower the larger and showing also a small black inferior point on the succeeding interspace. Very faint indications of other black accompanying points. Fringes obsoletely blackish dotted. Hind wings wholly blackish fuscous. Body like forewings in color. Beneath paler, irrorate; hind wings with an obscure discal point, the common transverse line faint. Expanse 27 mm.

Hab. Texas (Belfrage, No. 99, Oct. 13th).

Perhaps this is Mr. Morrison's *Caradrina disticha*; if so, Mr. Morrison's generic reference is incorrect.

**Agrotis excellens**, n. sp.

♂ ♀.—The type of *auxiliaris* has the costal region from the base outwardly and the collar ashen. A second specimen, received from Mr. Belfrage, agrees with the type. Another Texan specimen differs by the costal region and lower half of the collar being light brown and contrasting. Otherwise the specimens nearly agree, differences of color excepted. In particular the specimens have the wide secondaries and narrow primaries in common. Credit is due to Mr. Morrison for the determination that the last named Texan specimen may be considered to belong to *auxiliaris*. I had sent it to Mr. Morrison determined as a new species together with the type of *auxiliaris*. From Mr. Henry Edwards I have now received four specimens in excellent preservation which agree very nearly with the Texan specimen above alluded to but differ by the broader primaries and smaller secondaries as well as in color and some details of ornamentation. The collar is produced in front and there are slight metathoracic tuftings. I have noticed dorsal crestings in *saucia* also, and it is evident to me that our observations on the genus are as yet far from complete. The ground color is rich purple brown with the costal edge, the internal margin and the subterminal space shaded with white. The large stigmata are shaded with whitish and the reniform is less kidney shaped than in *auxiliaris*. The males have these portions of the wing, except the stigmata, more of a bright ruddy brown. Compared with *auxiliaris* the subterminal space seems a little narrower. The claviform and the pale ray above it are like *auxiliaris*. The species seems a little stouter bodied. Above the hind wings are similarly colored, while less ample, but beneath there is but faint trace of the common line and the terminal dark border is obsolete in *excellens*, in which the under surface of both wings is more irrorate than in *auxiliaris*. Expanse 40—46 mm.

Hab. Vancouver Island (Mr. Henry Edwards, No. 5570).

**Heliophila ligata**, n. sp.

♂ ♀.—This slender species has pure white secondaries and fringes in the female while in the opposite sex these are slightly soiled. Fore wings whitish ocher-gray, faintly purple tinged, with the veins obsoletely white marked and accompanied by longitudinal blackish shades. Median nervure covered by a white streak, culminating in a white spot relieving a single inferior black dot, and accompanied by a black shading which continues diffusely to external margin, and leaves a clear ochery streak above it on the celi, reaching beyond the dotted transverse line. T. p. line indicated by a series of black nervular points. Very minute marginal black points; fringes a little paler than the wing. Thorax and head like primaries. Beneath without discal dots or common lines; a terminal dotted line on both wings; primaries and costal region of secondaries somewhat rosy gray, else the secondaries are whitish, subpellucid.

Under surface of body and legs of a slightly rosy gray. Collar faintly lined. Expanse 28 mm.

Hab. Texas (Mr. Belfrage, Dec. 2d, No. 156); also coll. Am. Ent. Soc., Oct. 12th.

This may possibly be Mr. Morrison's variety of *Phragmitidicola*. It is a distinct species and does not accord well with any of Guenée's descriptions that I have yet been unable to identify. From Mr. Morrison's remarks it cannot be identified with certainty so that in case it is the same I must be excused from adopting a name proposed for a variety, not willingly believing that it could be taken for a variety of *phragmitidicola*.

### **Prothymia orgiae, n. sp.**

♂.—The palpi are long while in other respects the species agrees with *rosalba*, which Mr. Morrison has referred to this European genus of which I have seen no European representatives. The neuration has not been studied and the generic reference is not assured. The colors and appearance of this much smaller species recall the European *Xanthodes malvae*. The fore wings are triangulate with sharp apices. Above these are deep lemon-yellow, all the lines obsolete. Two light purple dots on the cell indicate the reniform and two obliquely placed similar dots probably indicate the position of the t. a. line. The t. p. line is better indicated by purple marks expanded on internal margin; it is very oblique, a little rounded opposite the cell. The fringes and external margin are washed with light purple. Hind wings and fringes wholly whitish. Collar and head stone purple, thorax clear yellow, abdomen pale. Beneath pale with a ruddy suffusion or irroration which especially clouds the primaries. Expanse 20 mm.

Hab. Texas (Belfrage, July 1, No. 122).

### **BOLINA.**

Mr. Morrison refers *nigrescens* as identical with *fasciolaris* in a recent paper, and since this reference, I am informed, has been made after consulting Hübner's figure, I must ascribe it either to an unscientific motive or to a want of proper discrimination. I have identified Hübner's *fasciolaris* in the collection of this Society. It is totally distinct from the Texan *nigrescens*, the primaries are narrower and longer and have the large yellowish oval subterminal patch (within which the t. p. line runs) and which is shown so characteristically in Hübner's figure. Mr. Morrison's *fasciolaris* must be considered as a synonym of *nigrescens*. Intermediate between *Bolina* and *Syneda* are two species found in Texas which differ by a sexual palpal distinction. In the male the third palpal joint is short and thicker, hardly differentiated from the second. In the female it is thin and elongate. The male antennæ are more loosely and lengthily ciliate and the legs are slenderer. The male is more distinctly marked and is described as

*Syneda deducta* Morr. The female seems to be described as *Syneda pavitensis* by Mr. Morrison. The second species is much larger and appears to be undescribed. For the two species I propose the name *Cirrhobolina*.

### 1. *Cirrhobolina deducta*.

♂ *Syneda deducta*, Morr. Proc. Bost. S. N. H. 220.

♀ *Syneda pavitensis*, Morr. Proc. Bost. S. N. H. 221.

Texas. Both sexes in considerable variation as to the distinctness of markings on the fore wings collected by Mr. Belfrage.

### 2. *Cirrhobolina incandescens*, n. sp.

Expanse 40 mm. ♀.—This larger species differs from *deducta*, by the fore wings being uniformly ashen, shaded with brown along the subterminal line which shows a superior black mark with a blackish indistinct ringlet to the reniform and some blackish costal blotches, else all the markings and lines obsolete. Hind wings as in *deducta* but with the lunule *very pale* not *deep* yellow. The undersurface differs from *deducta* in the obsolescence and fragmentary state of the terminal black borders and the inconspicuous discal point on the secondaries. Taken Dec. 1, by Mr. Belfrage and numbered "17."

To the kindness of Mr. Henry Edwards I owe an opportunity of examining specimens of *Syneda Edwardsii* Behr, *Syneda ochracea* Behr, *Syneda socia* Behr, *Syneda adumbrata* Behr, *Syneda divergens* Behr and *Syneda Stretchii* Behr, the latter is a later name for *Syneda Howlandii*, Grote.

### *Bolina ochreifascia*, Harvey.

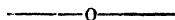
This species very nearly resembles *B. nigrescens* in size and color but may be sufficiently distinguished and is characterized by an oblique median ochreous fascia which shows outwardly the brown median shade line. I have adopted Dr. Harvey's MS. name. I have never found *B. pallescens* G. and R., in any of Mr. Belfrage's Texan collections which I have examined since 1866. The type in the Society's collection was collected by Mr. Cresson in the neighborhood of New Braunfels.

### *Melanomma auricinctaria*, n. g. et sp.

♂.—The antennæ are very shortly and coarsely bipectinate and the labial palpi are porrected and a little longer than usual. The hind tibiæ have two pair of spurs. The wings are elongate with arched apices and more rounded than in *Eupithecia*. The little moth has the appearance of *Cymatophora* (*Boarmia*) being gray with transverse dark lines. The inner line on the primaries is rivulous. An even

broader shaded median line, inwardly oblique and a little arcuated, is angulated on the cell outside of a black cellular eyelike spot which shows some central metallic scales and is more or less completely surrounded by a metallic iris prominently visible in certain lights. The outer line is double, rivulous, angulated opposite the spot and obsolete on costal region. Subterminal line double, rivulous, including superiorly metallic scales above and below a subcostal indentation of the line. Hind wings paler with double median and exterior lines not continued to costa. Beneath the primaries show the black and here larger discal spot with a yellow iris very distinctly, as also metallic scales between the double subterminal line. Secondaries darker than on upper surface, irrorate, with faint lines. Expanse .75 inch.

Hab. Pennsylvania.



### NOTE ON PAPILIO GUNDLACHIANUS.

BY A. R. GROTE.

As compared with *Machaon* and *Asterias* the Cuban species differs by the sinuate external margin of the fore wings while on the secondaries the discoidal cell is much smaller and the nervules thrown off at shorter intervals. The internal margin is folded in both sexes and in the male is brought entirely over, while the surface of the pouch thus formed is covered with whitish discolorous silky hair. The body is ornamented with scarlet patches of velvety consistence as in certain of the South American forms. I propose to make the species the type of a distinct genus which I name *BLAKEA* after my friend Mr. Charles A. Blake. *Blakea* differs by the metallic bands of the primaries which in the tailed species known to me are opaque.